

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 29

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* GERARD DE HAAN and DANIELE BAGNI

---

Appeal No. 2003-1085  
Application No. 09/190,670

---

ON BRIEF

---

Before OWENS, GROSS, and BARRY, *Administrative Patent Judges*.  
OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This appeal is from the final rejection of claims 1, 3, 4 and 6-10, which are all of the claims pending in the application.

*THE INVENTION*

The appellants claim methods for motion-compensated predictively encoding and decoding image signals. Claims 1 and 4 are illustrative:

1. A method of motion-compensated predictively encoding image signals, said method comprising the steps of:  
motion-compensated predictively encoding every third frame by means of motion vectors, and

supplying said every third frame without said motion vectors or motion parameters;

wherein in said motion-compensated predictively encoding every third frame, said motion vectors between a preceding pair of frames are used.

4. A method of motion-compensated predictively decoding image signals, said method comprising the steps of:

receiving always at least one motion-compensated predictively encoded frame from a transmission or recording medium without receiving motion vectors or motion parameters corresponding to said frame from said medium;

motion-compensated predictively decoding said at least one frame;

wherein in said motion-compensated predictively decoding said at least one frame, motion vectors between a preceding pair of frames are used.

#### *THE REFERENCES*

Yamashita et al. (Yamashita)	5,696,557	Dec. 9, 1997
Suzuki et al. (Suzuki)	6,097,842	Aug. 1, 2000 (filed Sep. 5, 1997)

#### *THE REJECTIONS*

The claims stand rejected as follows: claims 1 and 3 under 35 U.S.C. § 103 as obvious over Suzuki in view of Yamashita, and claims 4 and 6-10 under 35 U.S.C. § 102(e) as anticipated by Suzuki.

#### *OPINION*

We affirm the aforementioned rejections.

The appellants state that the claims stand or fall together (brief, page 3). We therefore limit our discussion to one claim

Appeal No. 2003-1085  
Application No. 09/190,670

to which each rejection applies, i.e., claims 1 and 4. See *In re Ochiai*, 71 F.3d 1565, 1566 n.2, 37 USPQ2d 1127, 1129 n.2 (Fed. Cir. 1995); 37 CFR § 1.192(c)(7)(1997).

*Claim 1*

The appellants' claim 1 claims a method comprising supplying every third frame without motion vectors or motion parameters, and motion-compensated predictively encoding that every third frame using motion vectors between a preceding pair of frames. The transition term "comprising" opens the claim to steps other than those recited. See *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981). Such steps include motion-compensated predictively encoding frames other than every third frame using motion vectors between a preceding pair of frames. This claim interpretation is consistent with the appellants' specification. The specification discloses motion-compensated predictively encoding picture  $P_3$  using motion vectors between a preceding pair of frames ( $MV_{P1-P2}$ ) and then motion-compensated predictively encoding picture  $P_4$  using motion vectors between a preceding pair of frames ( $MV_{P2-P3}$ ), and discloses that this process can go on indefinitely (page 10, lines 18-33).

Suzuki discloses a method of motion-compensated predictively encoding image signals wherein "the direct mode may predictively

encode a B-picture between two I- or P-pictures at different time points using a motion vector of a directly previously decoded P-picture" (col. 38, lines 9-12). Thus, Suzuki would have fairly suggested, to one of ordinary skill in the art, encoding B-pictures between two I- or P-pictures in any position, including the third frame, using motion vectors between a preceding pair of frames.

The appellants argue that if Suzuki's direct mode is not used, none of the pictures will be predictively encoded using a motion vector of a directly previously decoded P-picture (brief, page 4). Thus, the appellants argue, if Suzuki's disclosure is followed, not every third frame is predictively encoded using motion vectors between a preceding pair of frames as required by the appellants' claim 1. See *id.*

For a *prima facie* case of obviousness of the appellants' claimed method to be established, it is not necessary that the disclosures of all of Suzuki's modes would have fairly suggested, to one of ordinary skill in the art, predictively encoding every third frame using motion vectors between a preceding pair of frames. Instead, all that is needed is for the disclosure of any one mode to have done so. As discussed above, Suzuki's direct mode disclosure would have fairly suggested that claim

requirement to one of ordinary skill in the art.

We therefore conclude that the method claimed in the appellants' claim 1 would have been obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103. Accordingly, we affirm the rejection of that claim and claim 3 that stands or falls therewith.<sup>1</sup>

*Claim 4*

In the direct mode, Suzuki can receive always at least one motion-compensated predictively encoded B-picture from a transmission or recording medium without receiving motion vectors or motion parameters corresponding to the frame, and motion-compensated predictively encode (and, necessarily, decode) that frame using motion vectors between a preceding pair of frames (col. 1, lines 9-21; col. 38, lines 9-12).

The appellants argue that "the direct mode of Suzuki et al. is not always applied. Thus, it is evident that Suzuki et al. also does not meet the feature of either 'decoding or receiving always at least one motion-compensated predictively encoded frame without receiving motion vectors or motion parameters corresponding to the frame', as required by claims 4 and 7-8" (brief, page 5).

---

<sup>1</sup> We need not address Yamashita because it is merely cumulative.

Appeal No. 2003-1085  
Application No. 09/190,670

For Suzuki to anticipate the method claimed in the appellants' claim 4, it is only necessary for the disclosure of one mode to set forth the claim requirement relied upon by the appellants. As discussed above, that claim requirement is met by Suzuki's direct mode disclosure (col. 38, lines 9-12).

Accordingly, we find that Suzuki anticipates the method claimed in the appellants' claim 4. We therefore affirm the rejection of that claim and claims 6-10 that stand or fall therewith.

*DECISION*

The rejections of claims 1 and 3 under 35 U.S.C. § 103 over Suzuki in view of Yamashita, and claims 4 and 6-10 under 35 U.S.C. § 102(e) over Suzuki, are affirmed.

*AFFIRMED*

	)	
Terry J. Owens	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
Anita Pellman Gross	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
Lance Leonard Barry	)	
Administrative Patent Judge	)	

TJO/eld

Appeal No. 2003-1085  
Application No. 09/190,670

Philips Intellectual Property & Standards  
P.O. Box 3001  
Briarcliff Manor, NY 10510